

Minnesota Native Plant Classification Systems, Classes, Types, and Subtypes

January 2005

Class Code Class Name
Type Code Type Name
Subtype Code Subtype Name

Upland Forests and Woodlands

Fire-Dependent Forest/Woodland System

FDn12 Northern Dry-Sand Pine Woodland

- FDn12a Jack Pine Woodland (Sand)
- FDn12b Red Pine Woodland (Sand)

FDn22 Northern Dry-Bedrock Pine (Oak) Woodland

- FDn22a Jack Pine Woodland (Bedrock)
- FDn22b Red Pine - White Pine Woodland (Northeastern Bedrock)
- FDn22c Pin Oak Woodland (Bedrock)
- FDn22d Red Pine - White Pine Woodland (Eastcentral Bedrock)

FDn32 Northern Poor Dry-Mesic Mixed Woodland

- FDn32a Red Pine - White Pine Woodland (Canadian Shield)
- FDn32b Red Pine - White Pine Woodland (Minnesota Point)
- FDn32c Black Spruce - Jack Pine Woodland
- FDn32c1 *Jack Pine - Balsam Fir Subtype*
- FDn32c2 *Black Spruce - Feathermoss Subtype*
- FDn32c3 *Jack Pine - Black Spruce - Aspen Subtype*
- FDn32d Jack Pine - Black Spruce Woodland (Sand)
- FDn32e Spruce - Fir Woodland (North Shore)

FDn33 Northern Dry-Mesic Mixed Woodland

- FDn33a Red Pine - White Pine Woodland
- FDn33a1 *Balsam Fir Subtype*
- FDn33a2 *Mountain Maple Subtype*
- FDn33b Aspen - Birch Woodland
- FDn33c Black Spruce Woodland

FDn43 Northern Mesic Mixed Forest

- FDn43a White Pine - Red Pine Forest
- FDn43b Aspen - Birch Forest
- FDn43b1 *Balsam Fir Subtype*
- FDn43b2 *Hardwood Subtype*
- FDn43c Upland White Cedar Forest

FDc12 Central Poor Dry Pine Woodland

- FDc12a Jack Pine - (Bearberry) Woodland

FDc23 Central Dry Pine Woodland

- FDc23a Jack Pine - (Yarrow) Woodland
- FDc23a1 *Ericaceous Shrub Subtype*
- FDc23a2 *Bur Oak - Aspen Subtype*

FDc24 Central Rich Dry Pine Woodland

- FDc24a Jack Pine - (Bush Honeysuckle) Woodland
- FDc24a1 *Bracken Subtype*
- FDc24a2 *Bur Oak - Carrion-Flower Subtype*

FDc25 Central Dry Oak-Aspen (Pine) Woodland

- FDc25a Jack Pine - Oak Woodland
- FDc25b Oak - Aspen Woodland

FDc34 Central Dry-Mesic Pine-Hardwood Forest

- FDc34a Red Pine - White Pine Forest
- FDc34b Oak - Aspen Forest

FDs27 Southern Dry-Mesic Pine-Oak Woodland

- FDs27a Jack Pine - Oak Woodland (Sand)
- FDs27b White Pine - Oak Woodland (Sand)
- FDs27c Black Oak - White Oak Woodland (Sand)

FDs36 Southern Dry-Mesic Oak-Aspen Forest

- FDs36a Bur Oak - Aspen Forest

FDs37 Southern Dry-Mesic Oak (Maple) Woodland

- FDs37a Oak - (Red Maple) Woodland
- FDs37b Pin Oak - Bur Oak Woodland

FDs38 Southern Dry-Mesic Oak-Hickory Woodland

- FDs38a Oak - Shagbark Hickory Woodland

FDw24 Northwestern Dry-Mesic Oak Woodland

- FDw24a Bur Oak - (Prairie Herb) Woodland
- FDw24b Bur Oak - (Forest Herb) Woodland

FDw34 Northwestern Mesic Aspen-Oak Woodland

- FDw34a Aspen - (Prairie Herb) Woodland
- FDw34b Aspen - (Beaked Hazel) Woodland

FDw44 Northwestern Wet-Mesic Aspen Woodland

- FDw44a Aspen - (Cordgrass) Woodland
- FDw44b Aspen - (Chokecherry) Woodland

Mesic Hardwood Forest System

MHn35 Northern Mesic Hardwood Forest

- MHn35a Aspen - Birch - Basswood Forest
- MHn35b Red Oak - Sugar Maple - Basswood - (Bluebead Lily) Forest

MHn44 Northern Wet-Mesic Boreal Hardwood-Conifer Forest

- MHn44a Aspen - Birch - Red Maple Forest
- MHn44b White Pine - White Spruce - Paper Birch Forest
- MHn44c Aspen - Fir Forest
- MHn44d Aspen - Birch - Fir Forest

MHn45 Northern Mesic Hardwood (Cedar) Forest

- MHn45a Paper Birch - Sugar Maple Forest (North Shore)
- MHn45b White Cedar - Yellow Birch Forest
- MHn45c Sugar Maple Forest (North Shore)

MHn46 Northern Wet-Mesic Hardwood Forest

- MHn46a Aspen - Ash Forest
- MHn46b Black Ash - Basswood Forest

MHn47 Northern Rich Mesic Hardwood Forest

- MHn47a Sugar Maple - Basswood - (Bluebead Lily) Forest
- MHn47b Sugar Maple - Basswood - (Horsetail) Forest

MHc26 Central Dry-Mesic Oak-Aspen Forest

- MHc26a Oak - Aspen - Red Maple Forest
- MHc26b Red Oak - Sugar Maple - Basswood - (Large-Flowered Trillium) Forest

MHc36 Central Mesic Hardwood Forest (Eastern)

- MHc36a Red Oak - Basswood Forest (Noncalcareous Till)
- MHc36b Red Oak - Basswood Forest (Calcareous Till)

MHc37 Central Mesic Hardwood Forest (Western)

- MHc37a Aspen - (Sugar Maple - Basswood) Forest
- MHc37b Sugar Maple - Basswood - (Aspen) Forest

MHc38 Central Mesic Cold-Slope Hardwood-Conifer Forest

- MHc38a White Pine - Sugar Maple - Basswood Forest (Cold Slope)

MHc47 Central Wet-Mesic Hardwood Forest

- MHc47a Basswood - Black Ash Forest

MHs37 Southern Dry-Mesic Oak Forest

- MHs37a Red Oak - White Oak Forest
- MHs37b Red Oak - White Oak - (Sugar Maple) Forest

MHs38 Southern Mesic Oak-Basswood Forest

- MHs38a White Pine - Oak - Sugar Maple Forest
- MHs38b Basswood - Bur Oak - (Green Ash) Forest
- MHs38c Red Oak - Sugar Maple - Basswood - (Bitternut Hickory) Forest

MHs39 Southern Mesic Maple-Basswood Forest

- MHs39a Sugar Maple - Basswood - (Bitternut Hickory) Forest
- MHs39b Sugar Maple - Basswood - Red Oak - (Blue Beech) Forest
- MHs39c Sugar Maple Forest (Big Woods)

MHs49 Southern Wet-Mesic Hardwood Forest

- MHs49a Elm - Basswood - Black Ash - (Hackberry) Forest
- MHs49b Elm - Basswood - Black Ash - (Blue Beech) Forest

MHw36 Northwestern Wet-Mesic Hardwood Forest

- MHw36a Green Ash - Bur Oak - Elm Forest

Wetland Forests

Floodplain Forest System

FFn57	Northern Terrace Forest	FFs59	Southern Terrace Forest
FFn57a	Black Ash - Silver Maple Terrace Forest	FFs59a	Silver Maple - Green Ash - Cottonwood Terrace Forest
FFn67	Northern Floodplain Forest	FFs59b	Swamp White Oak Terrace Forest
FFn67a	Silver Maple - (Sensitive Fern) Floodplain Forest	FFs59c	Elm - Ash - Basswood Terrace Forest
		FFs68	Southern Floodplain Forest
		FFs68a	Silver Maple - (Virginia Creeper) Floodplain Forest

Wet Forest System

WFn53	Northern Wet Cedar Forest	WFs55	Southern Wet Aspen Forest
WFn53a	Lowland White Cedar Forest (North Shore)	WFs55a	Lowland Aspen Forest
WFn53b	Lowland White Cedar Forest (Northern)	WFs57	Southern Wet Ash Swamp
WFn55	Northern Wet Ash Swamp	WFs57a	Black Ash - (Red Maple) Seepage Swamp
WFn55a	Black Ash - Aspen - Balsam Poplar Swamp (Northeastern)	WFs57b	Black Ash - Sugar Maple - Basswood - (Blue Beech) Seepage Swamp
WFn55b	Black Ash - Yellow Birch - Red Maple - Basswood Swamp (Eastcentral)		
WFn55c	Black Ash - Mountain Maple Swamp (Northern)	WFw54	Northwestern Wet Aspen Forest
WFn64	Northern Very Wet Ash Swamp	WFw54a	Lowland Black Ash - Aspen - Balsam Poplar Forest
WFn64a	Black Ash - Conifer Swamp (Northeastern)		
WFn64b	Black Ash - Yellow Birch - Red Maple - Alder Swamp (Eastcentral)		
WFn64c	Black Ash - Alder Swamp (Northern)		

Forested Rich Peatland System

FPn62	Northern Rich Spruce Swamp (Basin)	FPn82	Northern Rich Tamarack Swamp (Western Basin)
FPn62a	Rich Black Spruce Swamp (Basin)	FPn82a	Rich Tamarack - (Alder) Swamp
FPn63	Northern Cedar Swamp	FPn82b	Extremely Rich Tamarack Swamp
FPn63a	White Cedar Swamp (Northeastern)	FPs63	Southern Rich Conifer Swamp
FPn63b	White Cedar Swamp (Northcentral)	FPs63a	Tamarack Swamp (Southern)
FPn63c	White Cedar Swamp (Northwestern)	FPw63	Northwestern Rich Conifer Swamp
FPn71	Northern Rich Spruce Swamp (Water Track)	FPw63a	Tamarack - Black Spruce Swamp (Aspen Parkland)
FPn71a	Rich Black Spruce Swamp (Water Track)	FPw63b	Tamarack Seepage Swamp (Aspen Parkland)
FPn72	Northern Rich Tamarack Swamp (Eastern Basin)		
FPn72a	Rich Tamarack Swamp (Eastcentral)		
FPn81	Northern Rich Tamarack Swamp (Water Track)		
FPn81a	Rich Tamarack (Sundew - Pitcher Plant) Swamp		

Acid Peatland System

APn80	Northern Spruce Bog	APn81	Northern Poor Conifer Swamp
APn80a	Black Spruce Bog	APn81a	Poor Black Spruce Swamp
APn80a1	<i>Treed Subtype</i>	APn81b	Poor Tamarack - Black Spruce Swamp
APn80a2	<i>Semi-Treed Subtype</i>	APn81b1	<i>Black Spruce Subtype</i>
		APn81b2	<i>Tamarack Subtype</i>

Upland Grasslands, Shrublands, and Sparse Vegetation

Cliff/Talus System

CTn11	Northern Dry Cliff	CTu22	Lake Superior Cliff
CTn11a	Dry Mafic Cliff (Northern)	CTu22a	Exposed Mafic Cliff (Lake Superior)
CTn11b	Dry Rove Cliff (Northern)	CTu22b	Exposed Felsic Cliff (Lake Superior)
CTn11c	Dry Thomson Cliff (Northern)	CTu22c	Sheltered Mafic Cliff (Lake Superior)
CTn11d	Dry Felsic Cliff (Northern)	CTs12	Southern Dry Cliff
CTn11e	Dry Sandstone Cliff (Northern)	CTs12a	Dry Sandstone Cliff (Southern)
CTn12	Northern Open Talus	CTs12b	Dry Limestone - Dolomite Cliff (Southern)
CTn12a	Dry Open Talus (Northern)	CTs12c	Dry Sioux Quartzite Cliff (Southern)
CTn12b	Mesic Open Talus (Northern)	CTs23	Southern Open Talus
CTn24	Northern Scrub Talus	CTs23a	Dry Limestone - Dolomite Talus (Southern)
CTn24a	Dry Scrub Talus (Northern)	CTs23b	Mesic Limestone - Dolomite Talus (Southern)
CTn24b	Mesic Scrub Talus (Northern)	CTs33	Southern Mesic Cliff
CTn32	Northern Mesic Cliff	CTs33a	Mesic Sandstone Cliff (Southern)
CTn32a	Mesic Mafic Cliff (Northern)	CTs33b	Mesic Limestone - Dolomite Cliff (Southern)
CTn32b	Mesic Rove Cliff (Northern)	CTs43	Southern Maderate Cliff
CTn32c	Mesic Thomson Cliff (Northern)	CTs43a	Moderate Cliff
CTn32d	Mesic Felsic Cliff (Northern)	CTs43a1	<i>Limestone Subtype</i>
CTn32e	Mesic Sandstone Cliff (Northern)	CTs43a2	<i>Dolomite Subtype</i>
CTn42	Northern Wet Cliff	CTs46	Southern Algific Talus
CTn42a	Wet Mafic Cliff (Northern)	CTs46a	Algific Talus
CTn42b	Wet Rove Cliff (Northern)	CTs46a1	<i>Limestone Subtype</i>
CTn42c	Wet Felsic Cliff (Northern)	CTs46a2	<i>Dolomite Subtype</i>
CTn42d	Wet Sandstone Cliff (Northern)	CTs53	Southern Wet Cliff
		CTs53a	Wet Sandstone Cliff (Southern)
		CTs53b	Wet Limestone - Dolomite Cliff (Southern)

Upland Grasslands, Shrublands, and Sparse Vegetation (cont.)

Rock Outcrop System

ROn12 Northern Bedrock Outcrop		ROs12 Southern Bedrock Outcrop	
ROn12a	Sandstone Outcrop (Northern)	ROs12a	Crystalline Bedrock Outcrop (Prairie)
ROn12b	Crystalline Bedrock Outcrop (Northern)	ROs12a1	Minnesota River Subtype
ROn23 Northern Bedrock Shrubland		ROs12a2	Sioux Quartzite Subtype
ROn23a	Bedrock Shrubland (Inland)	ROs12b	Crystalline Bedrock Outcrop (Transition)
ROn23b	Bedrock Shrubland (Lake Superior)	ROs12c	Sedimentary Bedrock Outcrop (Southeast)
		ROs12c1	Sandstone Subtype
		ROs12c2	Limestone-Dolomite Subtype

Lake Shore System

LKI32 Inland Lake Sand/Gravel/Cobble Shore		LKu32 Lake Superior Sand/Gravel/Cobble Shore	
LKI32a	Sand Beach (Inland Lake)	LKu32a	Beachgrass Dune (Lake Superior)
LKI32b	Gravel/Cobble Beach (Inland Lake)	LKu32b	Juniper Dune Shrubland (Lake Superior)
LKI43 Inland Lake Rocky Shore		LKu32c	Sand Beach (Lake Superior)
LKI43a	Boulder Shore (Inland Lake)	LKu32d	Beach Ridge Shrubland (Lake Superior)
LKI43b	Bedrock Shore (Inland Lake)	LKu32e	Gravel/Cobble Beach (Lake Superior)
LKI54 Inland Lake Clay/Mud Shore		LKu43 Lake Superior Rocky Shore	
LKI54a	Clay/Mud Shore (Inland Lake)	LKu43a	Dry Bedrock Shore (Lake Superior)
LKI54b	Mud Flat (Inland Lake)	LKu43b	Wet Rocky Shore (Lake Superior)
LKI54b1	Saline Subtype	LKu43b1	Cobble Subtype
LKI54b2	Non-Saline Subtype	LKu43b2	Bedrock Subtype

River Shore System

RVx32 Sand/Gravel/Cobble River Shore		RVx43 Rocky River Shore	
RVx32a	Willow Sandbar Shrubland (River)	RVx43a	Bedrock/Boulder Shore (River)
RVx32b	Sand Beach/Sandbar (River)	RVx43a1	Intermittent Streambed Subtype
RVx32b1	Intermittent Streambed Subtype	RVx43a2	Permanent Stream Subtype
RVx32b2	Permanent Stream Subtype	RVx54 Clay/Mud River Shore	
RVx32c	Gravel/Cobble Beach (River)	RVx54a	Slumping Clay/Mud Slope (River)
RVx32c1	Intermittent Streambed Subtype	RVx54b	Clay/Mud Shore (River)
RVx32c2	Permanent Stream Subtype	RVx54b1	Intermittent Streambed Subtype
		RVx54b2	Permanent Stream Subtype

Upland Prairie System

UPn12 Northern Dry Prairie		UPs13 Southern Dry Prairie	
UPn12a	Dry Barrens Prairie (Northern)	UPs13a	Dry Barrens Prairie (Southern)
UPn12b	Dry Sand - Gravel Prairie (Northern)	UPs13b	Dry Sand - Gravel Prairie (Southern)
UPn12c	Dry Sand - Gravel Brush-Prairie (Northern)	UPs13c	Dry Bedrock Bluff Prairie (Southern)
UPn12d	Dry Hill Prairie (Northern)	UPs13d	Dry Hill Prairie (Southern)
UPn13 Northern Dry Savanna		UPs14 Southern Dry Savanna	
UPn13a	Dry Barrens Jack Pine Savanna (Northern)	UPs14a	Dry Barrens Oak Savanna (Southern)
UPn13b	Dry Barrens Oak Savanna (Northern)	UPs14a1	Jack Pine Subtype
UPn13c	Dry Sand - Gravel Oak Savanna (Northern)	UPs14a2	Oak Subtype
UPn13d	Dry Hill Oak Savanna (Northern)	UPs14b	Dry Sand - Gravel Oak Savanna (Southern)
UPn23 Northern Mesic Prairie		UPs14c	Dry Hill Oak Savanna (Southern)
UPn23a	Mesic Brush-Prairie (Northern)	UPs23 Southern Mesic Prairie	
UPn23b	Mesic Prairie (Northern)	UPs23a	Mesic Prairie (Southern)
UPn24 Northern Mesic Savanna		UPs24 Southern Mesic Savanna	
UPn24a	Mesic Oak Savanna (Northern)	UPs24a	Mesic Oak Savanna (Southern)
UPn24b	Aspen Openings (Northern)		

Wetland Grasslands, Shrublands, and Marshes

Acid Peatland System

APn90 Northern Open Bog

- APn90a Low Shrub Bog
- APn90b Graminoid Bog
- APn90b1 *Typic Subtype*
- APn90b2 *Schlenke Subtype*

APn91 Northern Poor Fen

- APn91a Low Shrub Poor Fen
- APn91b Graminoid Poor Fen (Basin)
- APn91c Graminoid Poor Fen (Water Track)
- APn91c1 *Featureless Water Track Subtype*
- APn91c2 *Flark Subtype*

Open Rich Peatland System

OPn81 Northern Shrub Shore Fen

- OPn81a Bog birch - Alder Shore Fen
- OPn81b Leatherleaf - Sweet Gale Shore Fen

OPn91 Northern Rich Fen (Water Track)

- OPn91a Shrub Rich Fen (Water Track)
- OPn91b Graminoid Rich Fen (Water Track)
- OPn91b1 *Featureless Water Track Subtype*
- OPn91b2 *Flark Subtype*

OPn92 Northern Rich Fen (Basin)

- OPn92a Graminoid Rich Fen (Basin)
- OPn92b Graminoid - Sphagnum Rich Fen (Basin)

OPn93 Northern Extremely Rich Fen

- OPn93a Spring Fen

OPp91 Prairie Rich Fen

- OPp91a Rich Fen (Mineral Soil)
- OPp91b Rich Fen (Peatland)
- OPp91c Rich Fen (Prairie Seepage)

OPp93 Prairie Extremely Rich Fen

- OPp93a Calcareous Fen (Northwestern)
- OPp93b Calcareous Fen (Southwestern)
- OPp93c Calcareous Fen (Southeastern)

Wet Forest System

WFn74 Northern Wet Alder Swamp

- WFn74a Alder - (Red Currant - Meadow-Rue) Swamp

Forested Rich Peatland System

Fpn73 Northern Rich Alder Swamp

- Fpn73a Alder - (Maple - Loosestrife) Swamp

Wet Meadow/Carr System

WMn82 Northern Wet Meadow/Carr

- WMn82a Willow - Dogwood Shrub Swamp
- WMn82b Sedge Meadow
- WMn82b1 *Bluejoint Subtype*
- WMn82b2 *Tussock Sedge Subtype*
- WMn82b3 *Beaked Sedge Subtype*
- WMn82b4 *Lake Sedge Subtype*

Wms83 Southern Seepage Meadow/Carr

- Wms83a Seepage Meadow/Carr
- Wms83a1 *Tussock Sedge Subtype*
- Wms83a2 *Aquatic Sedge Subtype*
- Wms83a3 *Impatiens Subtype*

Wms92 Southern Basin Wet Meadow/Carr

- Wms92a Basin Meadow/Carr

Wmp73 Prairie Wet Meadow/Carr

- Wmp73a Prairie Meadow/Carr

Marsh System

MRn83 Northern Mixed Cattail Marsh

- MRn83a Cattail - Sedge Marsh (Northern)
- MRn83b Cattail Marsh (Northern)

MRn93 Northern Bulrush-Spikerush Marsh

- MRn93a Bulrush Marsh (Northern)
- MRn93b Spikerush - Bur Reed Marsh (Northern)

MRu94 Lake Superior Coastal Marsh

- MRu94a Estuary Marsh (Lake Superior)

MRp83 Prairie Mixed Cattail Marsh

- MRp83a Cattail - Sedge Marsh (Prairie)
- MRp83b Cattail Marsh (Prairie)

MRp93 Prairie Bulrush-Arrowhead Marsh

- MRp93a Bulrush Marsh (Prairie)
- MRp93b Spikerush - Bur Reed Marsh (Prairie)
- MRp93c Arrowhead Marsh (Prairie)

Wetland Prairie System

WPn53 Northern Wet Prairie

- WPn53a Wet Seepage Prairie (Northern)
- WPn53b Wet Brush-Prairie (Northern)
- WPn53c Wet Prairie (Northern)
- WPn53d Wet Saline Prairie (Northern)

WPs54 Southern Wet Prairie

- WPs54a Wet Seepage Prairie (Southern)
- WPs54b Wet Prairie (Southern)
- WPs54c Wet Saline Prairie (Southern)